

January 23, 2008

Mr. Michael Romero
Oregon Department of Environmental Quality – NW Region
2020 SW Fourth Avenue, Suite 400
Portland, Oregon 97201

**RE: Upland Stormwater Source Control Status
Kinder Morgan Liquid Terminals, LLC - Linnton Terminal
11400 NW St. Helens Road
Portland, Oregon**

Dear Mr. Romero:

Delta Consultants (Delta), on behalf of Kinder Morgan Liquid Terminals, LLC (KMLT), has prepared this letter to provide the status of ongoing work to evaluate the storm water source pathway for the KMLT Linnton Terminal located at 11400 NW St Helens Road, Portland, OR (Site) (Figure 1). Work summarized in this letter was completed consistent with Delta's approved *Storm Water Pathway Evaluation Work Plan (Work Plan)*, dated October 4, 2006.



SCOPE OF WORK

The scope of work summarized in Delta's *Work Plan* is to assess the storm water pathway in accordance with the December 2005 Joint Source Control Strategy developed jointly by the Oregon Department of Environmental Quality (DEQ) and the USEPA. Specifically, the scope will assess if chemicals from the KMLT Linnton terminal are migrating to the Willamette River at concentrations that potentially pose an unacceptable risk to human health or the environment.

The focus of the work was to first sample and analyze the sites catch basin sediments to identify potential chemicals of interest (COI). Secondly, stormwater discharge was sampled and analyzed for the potential COIs. In the *Work Plan*, Delta proposed to perform four storm water sampling events to further evaluate COIs. Catch basin sediment sampling and analysis was completed in October 2006 and three of the four storm water sampling events have been completed to date. Delta expects the fourth and final storm water sampling event will occur in the first quarter of 2008.

CATCH BASIN SEDIMENT SAMPLING & ANALYSIS AND RESULTS

On October 12, 2006, Delta personnel collected sediment from five catch basins (CB-1 through CB-5) at the Linnton Terminal (Figure 2). Sediment samples were collected in accordance with the methods and procedures described in the DEQs Standard Operating Procedures – Guidance for Sampling of Catch Basin Solids (JSCS 2005b).

Five individual grab sediment samples were collected from each catch basin (one from each quadrant and one from the middle), thoroughly mixed, and composited into one representative sample from each respective catch basin. Field records were kept to document the time of sampling, catch basin location and dimensions, the presence of water, grab sample locations, and the presence of any effluent/influent piping. Composite sediment samples ranged from silt to silty sand with gravel.



Laboratory Results

The five sediment samples representing each of five catch basins (CB-1 through CB-5) were submitted to Test America Laboratories of Beaverton, Oregon for chemical analysis. Analytical results are presented in Table 1 through Table 5. All samples were analyzed for the following.

Analysis	Method	MRL (mg/kg)
GRO	EPA Method NWTPH-Gx	4.67 – 7.81
DRO	EPA Method NWTPH-Dx	150 – 341
ORO	EPA Method NWTPH-Dx	300 – 682
VOCs	EPA Method 8260	0.114 – 4.91
PAHs	EPA Method 8270M SIM	0.0791 – 4.61
PCBs	EPA Method 8082	0.0017 – 0.084
Phthalates	EPA Method 8270-SIM	0.333 – 1.84
Total Metals	EPA Method 6000/7000	0.0878 – 231

Laboratory results were compared against specific stormwater Screening Level Values (SLVs) presented in Table 3-1 of the Joint Source Control Strategy (JSCS) and updated on July 16, 2007 (JSCS, 2005a). SLVs that were used for comparison include the "MacDonald PECs and other SQVs" and the "DEQ 2007 Bioaccumulative Sediment SLVs."

Concentrations of polycyclic aromatic hydrocarbons (PAHs), phthalates, and metals were detected in excess of applicable SLVs. Concentrations of diesel-range organics (DRO) and heavy oil-range organics (ORO) were detected; however, there are no established SLVs for these analytes. No VOCs were detected above SLVs. Laboratory results and SLV comparisons for sediment data are presented in Table 1 through Table 5.

STORMWATER SAMPLING & ANALYSIS

Stormwater samples were collected on April 5, 2007, May 24, 2007 and October 24, 2007. Stormwater at the Linnton Terminal is batched in Tank 3034, tested in accordance with the site NPDES permit and, if clean, discharged into the Willamette River. Prior to each sampling event, Tank 3034 was fully drained to eliminate stormwater mixing from previous storm events.

Laboratory Results

Stormwater samples were submitted to Test America Laboratories of Beaverton, Oregon for chemical analysis. Stormwater samples were analyzed for COIs that were identified during the catch basin sediment sampling and analysis investigation and as recommended by the DEQ. The following chemical analyses were performed for stormwater samples using the given method and MDLs:

Analysis	Method	MDL (µg/l)
GRO	EPA Method NWTPH-Gx	32.7
DRO	EPA Method NWTPH-Dx	9.05
ORO	EPA Method NWTPH-Dx	86.7
PAHs	EPA Method 8270M SIM	0.00493 – 0.0197
PCBs	EPA Method 8082	0.0962 – 0.192
Phthalates	EPA Method 8270-SIM	0.516
Total Metals	EPA Method 6000/7000	0.000338 – 0.977
TSS	APHA/EPA Parameters	2,380
TOC	APHA/EPA Parameters	317

During laboratory analysis, specific MDLs were used for result comparisons against SLVs presented in Table 3-1 of the JSCS and updated on July 16, 2007 (JSCS, 2007a). Results and SLV comparisons are presented on Table 6 through Table 11.

Concentrations of metals were the only analytes detected in excess of applicable SLVs. No other analytes were detected in concentrations that exceeded applicable SLVs. While laboratory attempts were made to achieve the lowest possible MDLs, in some cases MDLs exceeded the applicable SLV. This is noted with the laboratory results and SLV comparisons on Table 6 through Table 11.

DISCUSSION AND CONCLUSIONS

Beginning in October, 2006, Delta coordinated and conducted sediment and stormwater sampling at the Linnton Terminal in Portland, Oregon in accordance with the approved *Work Plan*. Catch basin sediment sampling and analysis identified COIs that included PAHs and metals. To date, three (April 2007, May 2007, and October 2007) of four stormwater sampling events have been completed and the final sampling event is scheduled for the first quarter 2008. During the first three storm water sampling events, only metals (Al, Ar, Cd, Pb, Mn, Hg, and Zn) have been detected in excess of applicable SLVs. No other COI has been detected in excess of applicable SLVs.

Please contact Chris Sheridan (Delta) or Timothy Browning (Delta) at (503) 639-8098 if you have any questions regarding the contents of this report.

Sincerely,

DELTA CONSULTANTS



Christopher Sheridan
Project Geologist



Tim Browning, R.G.
Senior Manager

Reviewed by,



Dawna Leong
Senior Engineer

Attachments: Table 1 – Summary of Sediment Analytical Results – TPH & VOCs
Table 2 – Summary of Sediment Analytical Results – Metals
Table 3 – Summary of Sediment Analytical Results – PAHs
Table 4 – Summary of Sediment Analytical Results – Phthalates
Table 5 – Summary of Sediment Analytical Results – PCBs
Table 6 – Summary of Stormwater Analytical Results – TPH
Table 7 – Summary of Stormwater Analytical Results – Metals
Table 8 – Summary of Stormwater Analytical Results – PAHs
Table 9 – Summary of Stormwater Analytical Results – PCBs
Table 10 – Summary of Stormwater Analytical Results – Phthalates
Table 11 – Summary of Stormwater Analytical Results – Parameters
Figure 1 – Site Location Map
Figure 2 – Site Drainage Plan and Sampling Locations
Attachment A – Laboratory Analytical Reports and Chain-of-Custody Documentation

REFERENCE:

JSCS, 2005a (updated in 2007). Joint Source Control Strategy, Table 3-1, Department of Environmental Quality and U.S. Environmental Protection Agency. July, 2007.

JSCS, 2005b. Appendix D: Standard Operating Procedures – Guidance for Sampling of Catch Basin Solids, Department of Environmental Quality and U.S. Environmental Protection Agency. December 2005.

TABLES

Table 1 - Summary of Sediment Analytical Data - TPH VOCs
Linnton Terminal Stormwater
Portland, Oregon

Sample ID	Sample Date	TPH-D (mg/kg)	TPH-O (mg/kg)	Benzene (µg/kg)
CB-1	10/12/06	401	321	<22.8
CB-2	10/12/06	390	1020	<25
CB-3	10/12/06	<159	390	<24.4
CB-4	10/12/06	38800	4990	<27
CB-5	10/12/06	8280	2750	289
Portland Harbor Joint Source Control Screening Level Values				
MacDonald PECs and other SQVs		N/A	N/A	N/A
DEQ 2007 Bioaccumulative Sediment SLVs		N/A	N/A	N/A
NOTES: Table summarizes laboratory contaminant detections and MRLs above appropriate SLVs. Screening Level Values (SLVs) taken from Table 3-1 of the Portland Harbor Joint Source Control Strategy (JSCS) guidance document, dated December 2005. Bold face font indicates analyte was either detected above or the MDL is above the applicable SLVs. µg/kg = micrograms per kilogram mg/kg = milligrams per kilogram < = less than the laboratory reporting limit N/A = Not applicable or not available TPH-D = Total Petroleum Hydrocarbons as Diesel TPH-O = Total Petroleum Hydrocarbons as Heavy Oil VOCs = Volatile Organic Compounds. Only one VOC detected. All MRLs are below the associated SLV.				

Table 2 - Summary of Sediment Analytical Data - Metals
 Linnton Terminal Stormwater
 Portland, Oregon

Sample ID	Sample Date	Aluminum (mg/kg)	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Manganese (mg/kg)	Nickel (mg/kg)	Thallium (mg/kg)	Zinc (mg/kg)
CB-1	10/12/06	9550	1.38	5.04	201	4.14	96.2	75.1	294	<0.110	487	53.9	<0.578	3540
CB-2	10/12/06	8390	1.2	16.4	150	3.18	74.2	122	341	0.134	482	47.2	<0.608	910
CB-3	10/12/06	9680	1.56	10.7	243	8.84	158	221	430	<0.0924	887	65	<0.622	2330
CB-4	10/12/06	6490	5.79	19.4	138	<0.682	38.2	56.2	1190	0.127	265	27.4	<0.682	414
CB-5	10/12/06	15600	1.48	12.7	489	<1	72.6	209	1600	0.569	521	47.5	<1	1700
Portland Harbor Joint Source Control Screening Level Values														
MacDonald PECs and other SQVs	N/A	64	33	N/A	4.98	111	149	128	1.06	1,100	48.6	N/A	459	
DEQ 2007 Bioaccumulative Sediment SLVs	N/A	10	7	N/A	1	N/A	N/A	17	70	N/A	N/A	N/A	N/A	
NOTES: Table summarizes laboratory contaminant detections and MRLs above appropriate SLVs. Appropriate SLV values to be used for initial source control screening are highlighted. Screening Level Values (SLVs) taken from Table 3-1 of the Portland Harbor Joint Source Control Strategy (JSCS) guidance document, dated December 2005. Bold face font indicates analyte was either detected above or the MDL is above the applicable SLVs. < = less than the laboratory reporting limit mg/kg = milligrams per kilogram														

Table 3 - Summary of Sediment Analytical Data - PAHs
 Linnton Terminal Stormwater
 Portland, Oregon

Sample ID	Sample Date	Acenaphthene (µg/kg)	Acenaphthylene (µg/kg)	Anthracene (µg/kg)	Benzo(a)anthracene (µg/kg)	Benzo(a)pyrene (µg/kg)	Benzo(b)fluoranthene (µg/kg)	Benzo(g,h,i)perylene (µg/kg)	Benzo(k)fluoranthene (µg/kg)	Chrysene (µg/kg)	Dibenzo(a,h)anthracene (µg/kg)	Fluoranthene (µg/kg)	Fluorene (µg/kg)	Indeno(1,2,3-cd)pyrene (µg/kg)	Naphthalene (µg/kg)	Phenanthrene (µg/kg)	Pyrene (µg/kg)
CB-1	10/12/06	<79.1	<79.1	<79.1	<79.1	164	157	259	102	150	<79.1	127	<79.1	158	<79.1	91.1	214
CB-2	10/12/06	<169	<169	<169	538	778	847	964	639	799	213	931	<169	702	<169	444	836
CB-3	10/12/06	<167	<167	<167	878	1140	1270	1000	1100	1330	258	2270	<167	852	<167	940	1290
CB-4	10/12/06	<4610 ^{1,2}	<4610 ^{1,2}	<4610 ^{1,2}	<922	<922	<1140	<1310 ¹	<922	2120	<922	<4610 ^{1,2}	<4610 ^{1,2}	<922 ¹	<4610 ^{1,2}	<4610 ^{1,2}	1760
CB-5	10/12/06	<1400 ^{1,2}	<1400 ^{1,2}	<1400 ^{1,2}	<700	888	1330	1370	964	1770	<700	1700	<1400 ^{1,2}	979	<1400 ^{1,2}	<1400 ^{1,2}	1490
Portland Harbor Joint Source Control Screening Level Values																	
MacDonald PECs and other SQVs		300	200	845	1050	1450	N/A	300	13000	1290	1300	2230	536	100	561	1170	1520
DEQ 2007 Bioaccumulative Sediment SLVs		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NOTES: Table summarizes laboratory contaminant detections and MDLs above appropriate SLVs. Appropriate SLV values to be used for initial source control screening are highlighted. Screening Level Values (SLVs) taken from Table 3-1 of the Portland Harbor Joint Source Control Strategy (JSCS) guidance document, dated December 2005. Bold face font indicates analyte was either detected above or the MDL is above the applicable SLVs. µg/kg = micrograms per kilogram < = less than the laboratory reporting limit ¹ = The reporting limit was raised due to dilution necessary for analysis. Sample contains high levels of reported analyte, non-target analyte, and/or matrix interference. ² = The reporting limit for this analyte was raised due to matrix interference. N/A = Not applicable or not available PAHs = Polynuclear Aromatic Hydrocarbons																	

Table 4 - Summary of Sediment Analytical Data - Phthalates
 Linnton Terminal Stormwater
 Portland, Oregon

Sample ID	Sample Date	Butylbenzyl phthalate (ug/kg)	Bis(2- ethylhexyl) phthalate (ug/kg)	Diethyl phthalate (ug/kg)	Di-n-butyl phthalate (ug/kg)
CB-1	10/12/06	<1270	2020	<1270 ¹	<1270 ¹
CB-2	10/12/06	711	1200	<337	<337 ¹
CB-3	10/12/06	<333	1280	<333	<333 ¹
CB-4	10/12/06	<1840	9520	<1840 ¹	<1840 ¹
CB-5	10/12/06	<1400	3260	<1400 ¹	<1400 ¹
Portland Harbor Joint Source Control Screening Level Values					
MacDonald PECs and other SQVs		N/A	800	600	100
DEQ 2007 Bioaccumulative Sediment SLVs		N/A	330	N/A	60
NOTES: Table summarizes laboratory contaminant detections and MRLs above appropriate SLVs. Appropriate SLV values to be used for initial source control screening are highlighted. ug/kg = micrograms per kilogram Screening Level Values (SLVs) taken from Table 3-1 of the Portland Harbor Joint Source Control Strategy (JSCS) guidance document, dated December 2005. Bold face font indicates analyte was either detected above or the MDL is above the applicable SLVs. < = less than the laboratory reporting limit ¹ = The reporting limit was raised due to dilution necessary for analysis. Sample contains high levels of reported analyte, non-target analyte, and/or matrix interference. N/A = Not applicable or not available					

Table 5 - Summary of Sediment Analytical Data - PCBs
 Linnton Terminal Stormwater
 Portland, Oregon

Sample ID	Sample Date	Aroclor 1015 (µg/kg)	Aroclor 1221 (µg/kg)	Aroclor 1232 (µg/kg)	Aroclor 1242 (µg/kg)	Aroclor 1248 (µg/kg)	Aroclor 1254 (µg/kg)	Aroclor 1260 (µg/kg)	Aroclor 1262 (µg/kg)	Aroclor 1268 (µg/kg)
CB-1	10/12/06	<3.1	<15.5	<6.72	<2.43	<2.08	<1.74	29.7	<1.7	<7.23
CB-2	10/12/06	<16.8	<84	<36.4	<13.2	<11.3	104	70.3	<9.24	<39.2
CB-3	10/12/06	<16.8	<83.8	<36.4	<13.1	<11.2	<9.40	29.4	<9.21	39.1
CB-4	10/12/06	<18.9	<94.2	<40.8	<14.8	<12.6	<10.6	<26.9	<10.4	<44
CB-5	10/12/06	<4.67	<23.3	<10.1	<3.65	<3.12	<2.61	<6.67	<2.56	<10.9
Portland Harbor Joint Source Control Screening Level Values										
MacDonald PECs and other SQVs		530	N/A	N/A	N/A	1500	300	200	N/A	N/A
DEQ 2007 Bioaccumulative Sediment SLVs		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NOTES Table summarizes laboratory contaminant detections and MRLs above appropriate SLVs. Appropriate SLV values to be used for initial source control screening are highlighted. Screening Level Values (SLVs) taken from Table 3-1 of the Portland Harbor Joint Source Control Strategy (JSCS) guidance document, dated December 2005. Bold face font indicates analyte was either detected above or the MDL is above the applicable SLVs. µg/kg = micrograms per kilogram < = less than the laboratory reporting limit N/A = Not applicable or not available PCBs = Polychlorinated Biphenols										

Table 6 - Summary of Stormwater Analytical Data - TPH
Linnton Terminal Stormwater
Portland, Oregon

Sample Identification	Date Sampled	TPH-G (µg/l)	TPH-D (µg/l)	TPH-O (µg/l)
T3034	04/05/07	54.50	483.00	190.00
T3034	05/24/07	<32.7	0.11	<0.0901
T3034	10/24/07	<80.0	<245	<490
Portland Harbor Joint Source Control Screening Level Values				
Tap Water PRGs		N/A	N/A	N/A
DEQs 2004 AWQC (Organism only)		N/A	N/A	N/A
DEQs 2004 AWQC (Chronic)		N/A	N/A	N/A
EPAs 2004 NRWQC (Organism only)		N/A	N/A	N/A
EPAs 2004 NRWQC (Chronic)		N/A	N/A	N/A
Oak Ridge National Laboratory (Tier II SCV)		N/A	N/A	N/A
NOTES: TPH-G analysis by Method NWTPH-Gx TPH-D and TPH-O analysis by Method NWTPH-Dx N/A = not available µg/l = Micrograms per Liter				

Table 7 - Summary of Stormwater Analytical Data - Metals
Linnton Terminal Stormwater
Portland, Oregon

Sample Identification	Date Sampled	Aluminum (mg/l)	Antimony (mg/l)	Arsenic (mg/l)	Barium (mg/l)	Beryllium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Manganese (mg/l)	Mercury ¹ (mg/l)	Nickel (mg/l)	Silver (mg/l)	Thallium (mg/l)	Zinc (mg/l)
T3034	04/05/07	0.052000	0.000245	0.000257	0.011200	<0.000128	0.000144	0.000650	0.001930	0.001410	0.042200	0.002580	0.001180	<0.0000117	0.000045	0.103000
T3034	05/24/07	0.0302	0.000368	<0.000531	0.0182	<0.000102	0.000096	0.000512	0.00204	0.00157	0.0901	<0.000338	0.00159	<0.000097	<0.0000145	0.072
T3034	10/24/07	0.123	<0.0008	<0.0008	0.0142	<0.0008	<0.0008	<0.0008	0.00231	0.00402	0.0489	0.0000109	0.0023	<0.0008	<0.0008	0.128
Portland Harbor Joint Source Control Screening Level Values																
MCL		N/A	0.006	0.01	N/A	N/A	0.005	0.1	N/A	N/A	0.050	0.002	N/A	0.1	N/A	5
Tap Water PRGs		37	0.015	0.000045	N/A	N/A	0.018	N/A	1.4	15	1.7	0.011	0.73	0.18	N/A	11
DEQs 2004 AWQC (Organism only)		N/A	0.64	0.00014	N/A	N/A	N/A	N/A	N/A	N/A	0.1	0.000146	4.6	N/A	N/A	26
DEQs 2004 AWQC (Chronic)		N/A	1.6	N/A	N/A	N/A	0.00038	N/A	0.0036	0.00054	N/A	0.000012	0.049	0.00012	N/A	0.033
EPAs 2004 NRWQC (Organism only)		N/A	0.64	0.00014	N/A	N/A	N/A	N/A	N/A	N/A	0.1	N/A	4.6	N/A	N/A	26
EPAs 2004 NRWQC (Chronic)		0.087	N/A	0.15	N/A	N/A	0.000094	N/A	0.0027	0.00054	N/A	0.00077	0.016	N/A	N/A	0.036
Oak Ridge National Laboratory (Tier II SCV)		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

NOTES:
Table summarizes laboratory contaminant detections and MDLs above appropriate SLVs. Appropriate SLV values to be used for initial source control screening are highlighted.
Italic face font indicates the laboratory method detection limit exceeds one or both SLVs.
Bold face font indicates analyte was detected above the applicable screening levels presented in Table 3-1 of the Portland Harbor JSCS guidance document, dated December 2005 and updated in 2007.
Total Metals Analysis by EPA 6000/7000 Series Methods
N/A = not available
mg/l = Milligrams per Liter

Table 8 - Summary of Stormwater Analytical Data - PAHs
 Linnton Terminal Stormwater
 Portland, Oregon

Sample Identification	Date Sampled	2-methyl naphthalene (ug/l)	Acetanthenone (ug/l)	Acenaphthylene (ug/l)	Anthracene (ug/l)	Benzo (a) anthracene (ug/l)	Benzo (a) pyrene (ug/l)	Benzo (b) fluoranthene (ug/l)	Benzo (ghi) perylene (ug/l)	Benzo (k) fluoranthene (ug/l)	Chrysene (ug/l)	Dibenz (ah) anthracene (ug/l)	Fluoranthene (ug/l)	Fluorene (ug/l)	Indeno (1,2,3-cd) pyrene (ug/l)	Naphthalene (ug/l)	Phenanthrene (ug/l)	Pyrene (ug/l)
T3034	04/05/07	N/A	<0.00493	<0.00493	<0.00493	<0.00493	<0.00493	<0.00493	<0.00493	<0.00493	<0.00493	<0.00493	<0.00493	<0.00493	<0.00493	<0.00985	<0.00493	<0.0197
T3034	05/24/07	<0.0494	<0.0494	<0.0494	<0.0494	<0.00494	<0.00494	<0.00494	<0.0494	<0.00494	<0.00494	<0.00494	<0.0494	<0.0494	<0.00494	<0.0494	<0.0494	<0.0494
T3034	10/24/07	<0.0952	<0.0952	<0.0952	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.0952	<0.00476	<0.0952	<0.0952	<0.0952
Portland Harbor Joint Source Control Screening Level Values																		
MCL		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Tap Water PRGs		N/A	370	N/A	1800	0.092	0.0092	0.092	N/A	0.92	9.2	0.0092	1500	240	0.092	6.2	N/A	180
DEQs 2004 AWQC (Organism only)		N/A	990	N/A	40000	0.018	0.018	0.018	N/A	0.018	0.018	0.018	140	5300	0.018	N/A	N/A	4000
DEQs 2004 AWQC (Chronic Receptors)		N/A	520	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	620	N/A	N/A
EPAs 2004 NRWQC (Organism only)		N/A	990	N/A	40000	0.018	0.018	0.018	N/A	0.018	0.018	0.018	140	5300	0.018	N/A	N/A	4000
EPAs 2004 NRWQC (Chronic)		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oak Ridge National Laboratory (Tier II SCV)		2.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

NOTES:
 Table summarizes laboratory contaminant detections and MRLs above appropriate SLVs. Appropriate SLV values to be used for initial source control screening are highlighted.
Italic face font indicates the laboratory method detection limit exceeds one or both SLVs.
Bold face font indicates analyte was detected above the applicable screening levels presented in Table 3-1 of the Portland Harbor JSCS guidance document, dated December 2005 and updated in 2007.
 PAHs analyzed by EPA Method 8270M-SIM
 N/A = not available
 ug/l = Micrograms per liter

Table 9 - Summary of Stormwater Analytical Data - PCBs
Linnton Terminal Stormwater
Portland, Oregon

Sample Identification	Date Sampled	Aroclor 1016 (µg/L)	Aroclor 1221 (µg/L)	Aroclor 1232 (µg/L)	Aroclor 1242 (µg/L)	Aroclor 1243 (µg/L)	Aroclor 1254 (µg/L)	Aroclor 1260 (µg/L)
T3034	04/05/07	<0.0962	<0.192	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962
T3034	05/24/07	<0.0485	<0.0971	<0.0485	<0.0485	<0.0485	<0.0485	<0.0485
T3034	10/24/07	<0.190	<0.381	<0.190	<0.190	<0.190	<0.190	<0.190
Portland Harbor Joint Source Control Screening Level Values								
MCL		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tap Water PRGs		0.96	0.034	0.034	0.034	0.034	0.034	0.034
DEQs 2004 AWQC (Organism only)		N/A	N/A	N/A	N/A	N/A	N/A	N/A
DEQs 2004 AWQC (Chronic)		N/A	N/A	N/A	N/A	N/A	N/A	N/A
EPAs 2004 NRWQC (Organism only)		N/A	N/A	N/A	N/A	N/A	N/A	N/A
EPAs 2004 NRWQC (Chronic)		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oak Ridge National Laboratory (Tier II SCV)		N/A	N/A	N/A	N/A	N/A	0.033	N/A
NOTES: Table summarizes laboratory contaminant detections and MRLs above appropriate SLVs. Appropriate SLV values to be used for initial source control screening are highlighted. <i>Italic</i> face font indicates the laboratory method detection limit exceeds one or both SLVs. Bold face font indicates analyte was detected above the applicable screening levels presented in Table 3-1 of the Portland Harbor JSCS guidance document, dated December 2005 and updated in 2007. PCBs analyzed by EPA Method 8082 N/A = not available ug/l = Micrograms per liter								

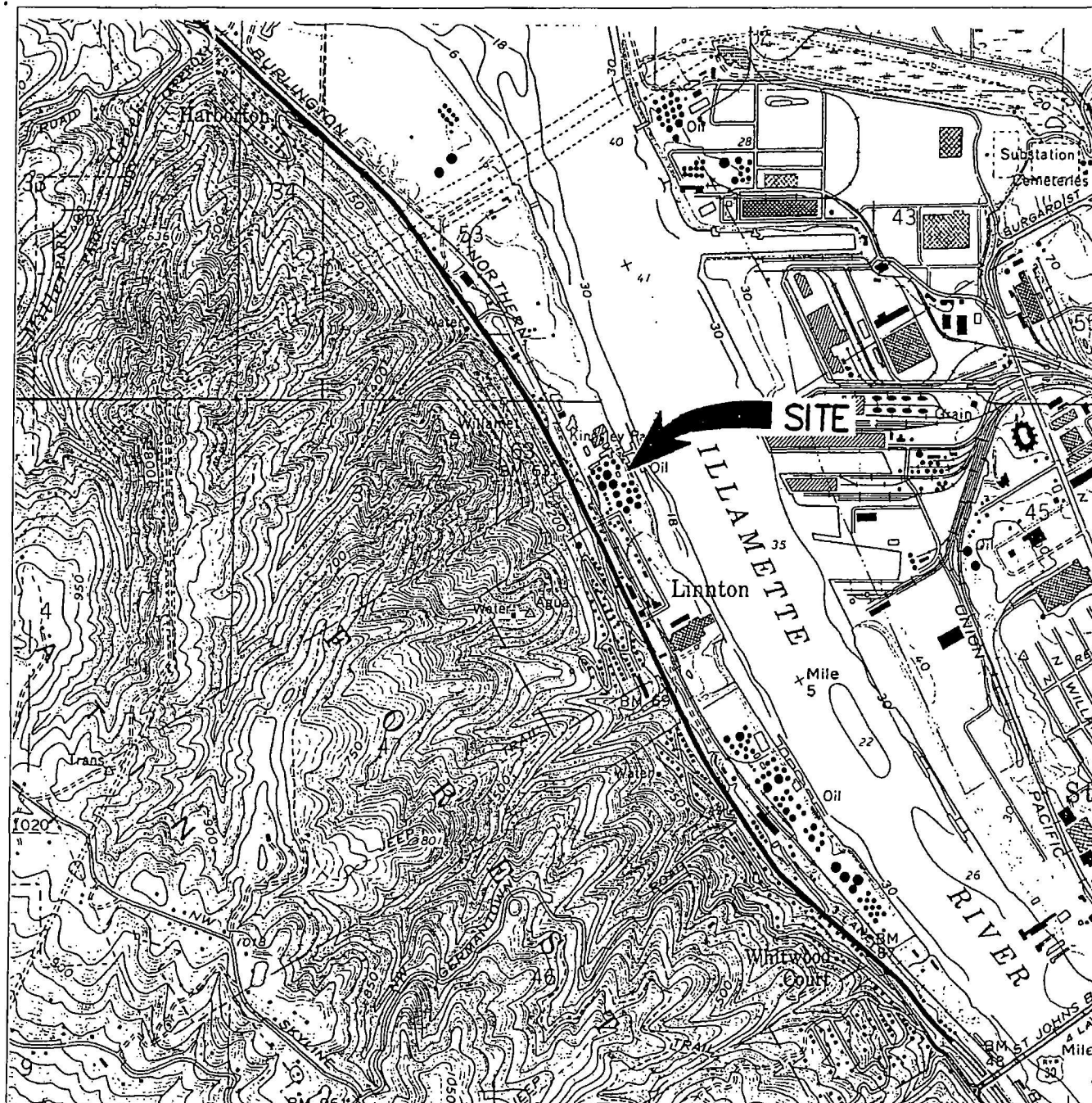
Table 10 - Summary of Stormwater Analytical Data - Phthalates
Linnton Terminal Stormwater
Portland, Oregon

Sample Identification	Date Sampled	Dimethyl phthalate (ug/L)	Diethyl phthalate (ug/L)	Di-n-butyl phthalate (ug/L)	Butyl benzyl phthalate (ug/L)	Di-n-octyl phthalate (ug/L)	Bis-2-ethyl hexylphthalat (ug/L)
T3034	04/05/07	<0.516	<0.516	<0.516	<0.516	<0.516	N/A
T3034	05/24/07	<0.526	<0.526	<0.526	<0.526	<0.526	<0.526
T3034	10/24/07	<0.952	<0.952	<0.952	<0.952	<0.952	<0.952
Portland Harbor Joint Source Control Screening Level Values							
MCL		N/A	N/A	N/A	N/A	N/A	N/A
Tap Water PRGs		370000	29000	3700	7300	1500	4.8
DEQs 2004 AWQC (Organism only)		1100000	44000	4500	1900	N/A	2.2
DEQs 2004 AWQC (Chronic)		3	3	3	3	3	3
EPAs 2004 NRWQC (Organism only)		1100000	44000	4500	1900	N/A	2.2
EPAs 2004 NRWQC (Chronic)		N/A	N/A	N/A	N/A	N/A	N/A
Oak Ridge National Laboratory (Tier II SCV)		N/A	N/A	N/A	N/A	N/A	N/A
NOTES: Table summarizes laboratory contaminant detections and MRLs above appropriate SLVs. Appropriate SLV values to be used for initial source control screening are highlighted. <i>Italic</i> face font indicates the laboratory method detection limit exceeds one or both SLVs. Bold face font indicates analyte was detected above the applicable screening levels presented in Table 3-1 of the Portland Harbor JSCS guidance document, dated December 2005 and updated in 2007. Phthalates analyzed by EPA Method 8270-SIM N/A = not available ug/l = Micrograms per liter							

Table 11 - Summary of Stormwater Analytical Data - Parameters
 Linnton Terminal Stormwater
 Portland, Oregon

Sample Identification	Date Sampled	TSS (mg/L)	TOC (mg/L)
T3034	04/05/07	4.0	1.95
T3034	05/24/07	8.0	1.99
T3034	10/24/07	10.0	2.11
Portland Harbor Joint Source Control Screening Level Values			
MCL		N/A	N/A
Tap Water PRGs		N/A	N/A
DEQs 2004 AWQC (Organism only)		N/A	N/A
DEQs 2004 AWQC (Chronic)		N/A	N/A
EPAs 2004 NRWQC (Organism only)		N/A	N/A
EPAs 2004 NRWQC (Chronic)		N/A	N/A
Oak Ridge National Laboratory (Tier II SCV)		N/A	N/A
NOTES: Parameters analyzed by APHA/EPA Methods ug/l = Micrograms per liter TSS = Total Suspended Solids TOC = Total Organic Carbon N/A = not available			

FIGURES



REFERENCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP
 LINNTON, OREGON, 1961
 PHOTOREVISED 1984

SCALE 1 : 25,000



QUADRANGLE LOCATION



FIGURE 1

SITE LOCATION MAP

Kinder Morgan Liquid Terminals LLC - Linnton Terminal
 11400 NW St. Helens Road
 Portland, Oregon

PROJECT NO. PTKM-010-11	DRAWN BY CRF
FILE NO.	PREPARED BY CRF 4/4/07
REVISION NO.	REVIEWED BY



